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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,563	06/01/2007	Takashi Hotta	77661/73	4705

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EXAMINER	
LUKS, JEREMY AUSTIN	

ART UNIT	PAPER NUMBER
2832	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/594,563	HOTTA ET AL.	
	Examiner	Art Unit	
	JEREMY LUKS	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 11-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 11-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/17/10 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun (2004/0144367) in view of Kanda (4,924,966).

With respect to Claim 1, Braun teaches a delivery pipe (Figure 10) comprising: an outer pipe (134) having a longitudinal direction; an inner pipe (110) extending in the longitudinal direction and fluidly isolated from the outer pipe (134); wherein the outer pipe (134) is connected to a plurality of fuel injectors (136a-d) of a multi-cylinder internal combustion engine (Page 2, [0027]), the outer pipe (134) being provided with a connector for causing fuel to flow to a fuel passage defined between the outer pipe

(134) and the inner pipe (110) (Page 2, Lines 9-10 of [0027]), the inner pipe (110) being disposed in the outer pipe (134) and having an open end (117) through which an interior of the inner pipe (110) directly communicates with atmosphere (Page 2, [0024]-[0025]), and is fluidly isolated from the outer pipe (134).. Braun fails to teach a noise emission decreasing device including a mesh located within the inner pipe, and the noise emission decreasing device made separately from the inner pipe and fixed to the open end of the inner pipe so as to act being adapted to act so as to decrease a noise emitted from the inner pipe, wherein the noise emission decreasing device is provided at all portions of a cross section of an interior of the inner pipe, and is fluidly isolated from the outer pipe, and directly communicates with the atmosphere.. Kanda teaches wherein it is known to provide an inner resonating pipe (Figures 1-2, #12) with a noise emission decreasing device (Figures 1-4, #14) including a mesh (Col. 3, Lines 46-48) located within the inner pipe (12), when used in combination, and the noise emission decreasing device (14) made separately from the inner pipe (Kanda #12, Braun #117) and fixed to the open end of the inner pipe (Kanda #12, Braun #117) so as to act to decrease a noise emitted from the inner pipe (Kanda #12, Braun #117) (Kanda, Col. 4, Lines 28-34), wherein the noise emission decreasing device (14) is provided at all portions of a cross section of an interior of the inner pipe (Kanda #12, Braun #117, and when combined will be is fluidly isolated from the outer pipe (of Braun #134), and directly communicates with the atmosphere. When device #14 as seen in Figure 3 of Kanda is constructed of a metal mesh, it will not have hole #13 (Col. 3, Lines 46-48), and will be provided at all portions of a cross section of an interior of the inner pipe #12,

when used in combination. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Braun, with the apparatus of Kanda to suppress resonance within the inner pipe/damper #110 of Braun.

With respect to Claims 11 and 12, Kanda teaches wherein the noise emission decreasing device (Figures 1-4, #14) is disposed at the open end of the inner pipe (12); and wherein the noise emission decreasing device (14) is disposed at a longitudinally intermediate portion of the inner pipe (12). Braun and Kanda fail to explicitly teach wherein the noise emission decreasing device is disposed at *only* the open end of the inner pipe; and wherein the noise emission decreasing device is disposed at *only* a longitudinally intermediate portion of the inner pipe. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide wherein the noise emission decreasing device is disposed at *only* the open end of the inner pipe; and wherein the noise emission decreasing device is disposed at *only* a longitudinally intermediate portion of the inner pipe, since it has been held that omission of an element and its function in a combination where the remaining elements perform the same function as before involves only routine skill in the art. In re Karlson, 136 USPQ 184. Further, providing additional or fewer of elements #14 within the pipe will function to tune the device, making it an obvious matter of design choice.

With respect to Claims 13, Kanda teaches wherein the noise emission decreasing device (Figures 1-4, #14) is attached within the pipe (12, will be inner pipe when used in combination with Braun) and is located inside the pipe (12, will be inner pipe when used in combination with Braun) (Col. 3, Lines 33-36). Further, with respect

to pressing the material inside the inner pipe, the method of forming a device is not germane to the issue of patentability of the device itself. Therefore, this limitation has been given little patentable weight.

With respect to Claim 14, Kanda teaches wherein the noise emission decreasing device (Figures 1-4, #14) is attached within the pipe (12, will be inner pipe when used in combination with Braun) and is located inside the pipe (12, will be inner pipe when used in combination with Braun) (Col. 3, Lines 33-36). The Examiner considers the disclosure of "attaching" to encompass bonding, which is a well known method of attachment. Further, the method of forming a device is not germane to the issue of patentability of the device itself. Therefore, this limitation has been given little patentable weight.

Response to Arguments

3. Applicant's arguments with respect to claims 1 and 11-14 have been considered but are moot in view of the new ground(s) of rejection. The Examiner considers the obvious combination of Braun and Kanda to teach all of the limitations as claimed by Applicant.

4. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

5. In response to applicant's argument that Braun and Kanda do not teach the claimed invention, including the limitations: "wherein the noise emission decreasing device…is fluidly isolated from the outer pipe, and directly communicates with the atmosphere," the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Braun teaches that the interior of the inner pipe (Figure 10, #117) is fluidly isolated from the outer pipe (134), and directly communicates with the atmosphere (via open ends of pipe #117). The interior pipe (117) of Braun will resonated due to the pressure pulses within the outer pipe (134) when in use. Kanda teaches incorporating a noise emission decreasing device (14) into a hollow resonant pipe (12) to reduce noise. When the principle of adding the noise emission reducing material (14) of Kanda is incorporated into the interior pipe (117) of Braun, it will be fluidly isolated from the outer pipe (Braun #134), and will directly communicate with the atmosphere, due to its location within the inner pipe (Braun 117). Therefor, the combination is proper and teaches all of the limitations of claim 1.

6. It is further noted that the embodiment shown in Figure 5 of Braun, reproduced in Applicant's arguments, is not the embodiment which the Examiner has relied upon. Rather, the embodiment shown in Figure 10 of Braun has been relied up by the Examiner.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy Luks whose telephone number is (571) 272-2707. The examiner can normally be reached on Monday-Friday, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeremy Luks/
Examiner, Art Unit 2832